United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **3/31/2017**

Subject: **Analytical Testing Results - Project R17E01**
SDG: 17076E

From: **Peter Husby, Director**
EPA Region 9 Laboratory
EMD-3-1

To: **Janice Chan**
Enforcement Division, Air Section
ENF-2-1

Attached are the results from the analysis of samples from the **Catalytic Converter Analysis FY2017** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Peter Husby, the Lab Project Manager at (510)412-2300.

Electronic CC: Matt Salazar, ENF-2-1
Andrew Zelling, Nathan Dancher, ENF-2-1
Elfego Felix, Kingsley Adeduro, ENF-2-1

Analyses included in this report:

Platinum Group Metals by XRF

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1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Janice Chan	**Enforcement Division, Air Section**	**SDG:** 17076E
Project Number: R17E01	**75 Hawthorne Street**	**Reported:** 03/31/17 12:46
Project: Catalytic Converter Analysis FY2017	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
LWGPCML05HA054568	1703050-01	Solid	03/16/17 00:00	03/17/17 14:15

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Enforcement Division, Air Section
75 Hawthorne Street
San Francisco CA, 94105

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Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1703050-01**									**Solid - Sampled: 03/16/17 00:00**
Sample ID: **LWGPCML05HA054568**									**XRF Analysis of Platinum Group Metals**
Platinum		ND	A-01, J, U	160	mg/kg	B17C123	03/29/17	03/29/17	XRF
Palladium		2,500	A-01, J	40	"	"	"	"	XRF
Rhodium		280	A-01, J	40	"	"	"	"	XRF

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B17C123 - - General Biology - Platinum Group Metals by XRF										**Prepared & Analyzed: 03/29/17**
										XRF Analysis of Platinum Group Metals - Quality Control
Blank (B17C123-BLK1)										
Platinum	ND	U	160	mg/kg						
Palladium	ND	U	40	"						
Rhodium	ND	U	40	"						
Blank (B17C123-BLK2)										
Platinum	ND	U	160	mg/kg						
Palladium	ND	U	40	"						
Rhodium	ND	U	40	"						
Reference (B17C123-SRM1)										
Platinum	770			mg/kg	697		111	85-115		
Palladium	290			"	326		89	85-115		
Rhodium	52			"	51.2		102	85-115		
Reference (B17C123-SRM2)										
Platinum	1,100			mg/kg	1130		101	85-115		
Palladium	230			"	233		99	85-115		
Rhodium	140			"	135		101	85-115		
Reference (B17C123-SRM3)										
Platinum	1,700			mg/kg	1780		97	85-115		
Palladium	280			"	279		100	85-115		
Rhodium	350			"	338		105	85-115		
Reference (B17C123-SRM4)										
Platinum	750			mg/kg	697		108	85-115		
Palladium	290			"	326		88	85-115		
Rhodium	52			"	51.2		102	85-115		
Reference (B17C123-SRM5)										
Platinum	1,200			mg/kg	1130		105	85-115		
Palladium	230			"	233		100	85-115		
Rhodium	140			"	135		106	85-115		
Reference (B17C123-SRM6)										
Platinum	1,700			mg/kg	1780		98	85-115		
Palladium	280			"	279		102	85-115		
Rhodium	360			"	338		107	85-115		

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Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
A-01	Insufficient sample for separate washcoat analysis.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

VIN Number	Engine Family	SAMPLE ID	Catalyst Type	Substrate Len.	Substrate Dia.	Substrate Vol.	Substrate Area	Cells	CPSI
				(cm)	(cm)	(cm^3)	(in^2)	#	
LWGPCML05HA054568	HHSNX.196A21	1703050-01	Honeycomb	3.51	3.01	24.9	1.10	323	294

VIN Number	Engine Family	SAMPLE ID	Pt	Pd	Rh	Ratio	Active Material
			mg/Kg	mg/Kg	mg/Kg	Pt:Pd:Rh	Loading (g/ft3)*
LWGPCML05HA054568	HHSNX.196A21	1703050-01***	0	2493	285	0:9:1	59

***A-01 and J flag: The amount of extracted washcoat for Sample 1703050-01 was outstandingly less than the amount necessary for analysis. As a result, the washcoat powder was analyzed with the substrate grindings.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

I, Janice Chan (Name) of USEPA (Business/Agency) hereby certify I removed the following item; exhaust system. I marked the item with:
VIN or ESN: LNGPCML05HA054568
The item is from Entry No.: 9AR-0272858-2 Date Removed: 3/16/17
From a: 2017 (Year) Hisun Motor Corp (Make) CT200U (Model)
Allegedly covered by USEPA Engine Family: HHSNX.196A21 (Engine Family).
I further certify on 3/16/17, I secured the described item prior to shipping it.

CHAIN OF CUSTODY

Released By:	Date and Time	Received By:	Date and Time	Remarks
Name: T. Vallery	3/16/17 1345	Name: Janice Chan	3/16/17 1345	
Organization: CBP	Seal Intact? Y,N, Comment	Organization: USEPA	Seal Intact? Y,N, Comment	
Signature: T. Vallery		Signature:		
Name: Janice Chan	3/16/17	Name: Rose Gale	3/16/17	
Organization: USEPA	Seal Intact? Y,N, Comment	Organization: USEPA	Seal Intact? Y,N, Comment	
Signature:	1423	Signature:	3:05pm	
Name:		Name: Junn Masongsong	3/17/17	
Organization:	Seal Intact? Y,N, Comment	Organization: R9 LAB	Seal Intact? Y,N, Comment	
Signature:		Signature:	1415	
Name:		Name:		
Organization:	Seal Intact? Y,N, Comment	Organization:	Seal Intact? Y,N, Comment	
Signature:		Signature:		
Name:		Name:		
Organization:	Seal Intact? Y,N, Comment	Organization:	Seal Intact? Y,N, Comment	
Signature:		Signature:		

Version: July 2015

Enforcement Confidential – Do not release under FOIA

Cooler/Box/Env 1 of 1

U.S. Environmental Protection Agency
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Sample Receipt Checklist

Project No: R17F01 **Work Order No(s):** 1703050 **Date:** 3/17/17 **by** SD

CUSTODY SEALS Intact ☐ Yes ☐ No ☒ N/A- None
Check if applies: ☐ External Seals ☐ Internal Seals ☐ Hand Delivered

TEMPERATURE 20 **°C Within Acceptable Range** ☐ Yes ☐ No ☒ Ambient OK
Check if applies:
☐ Provided Temp Blank ☐ Between 6°C to 10°C ☐ Still cooling (sampled today & iced)
☐ Previously Frozen ☐ Insufficient/Melted Ice ☐ Delivery Delay

SAMPLE CONTAINERS Intact ☒ Yes ☐ No
If not intact, was volume recoverable for analysis? ☐ Yes ☐ No ☒ N/A
Check if applies: ☐ Bottle/Jar/Vial broken ☐ Cap broken or loose ☐ Other _____

CHAIN OF CUSTODY Received ☒ Yes ☐ No
COC complete and consistent with labels JM 3/17/17 ☒ Yes ☐ No ☐ N/A
Check if applies: ☐ Not relinquished ☐ Inconsistency resolved ☐ Follow-up needed (see comments)
TAT and analyses match scheduling ☒ Yes ☐ No ☐ N/A
Check if applies: ☐ Preliminary Results ☐ Rush Request ☐ 7-day TAT
Within hold times ☐ Expires today ☒ Yes ☐ No ☐ N/A
All shipping and sample containers accounted for ☒ Yes ☐ No ☐ N/A

PRESERVATION / FILTRATION ☒ N/A No chem. pres./filtra.
Check if applies: ☐ Sample Receiving to preserve
☐ Analyst to filter and/or preserve
Preserved and/or filtered samples correctly identified ☐ Yes ☐ No ☒ N/A
Preserved samples (non-VOA vials) measured at correct pH ☐ Yes ☐ No ☒ N/A
Preservation/measured pH _____

Sample Receiving Preservation and/or pH Adjustments*

Sample ID	Initial pH	Pres.	Date/time Pres. added	Adjusted pH	pH after 16-hrs (metals)	Date/time of pH recheck	Rechecked by

*(continue on back, if needed)

FOLLOW-UP / COMMENTS COC not signed in "Relased By" section